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BRIEFS

MARKED 'COPTER. Effective April 18, 1983 requirements for the size of registration marks for rotorcraft have been changed. In place of the dual markings previously required (20 inches high on the bottom and 2 inches high on the side of the fuselage), one set of marks 12 inches high—or as high as practicable—will be required on the sides only. Existing rotorcraft may continue to operate with the old markings until the numbers are restored, repainted, or changed. Rotorcraft manufactured after December 31, 1983 will have the new-size numbers painted on at the factory.

X-C EXEMPTION. Applicants certificated as private or commercial pilots by June 30, 1983 may satisfy the long-distance crosscountry requirement either according to the "old" rules or the "new" rules, thanks to a temporary "blanket" exemption issued by FAA. As of July 1 the rule amendments enacted on November 15, 1982 will be mandatory. See Petition of Peachtree DeKalb Flight Academy, Exemption No. 3707, Regulatory Docket No. 23507, or contact Art Jones, Airman Certification Branch, AFO-840, 800 Independence Ave., S.W., Washington, DC; (202) 426-8196.

SPARE THE SPAR. The main spar wing fittings of some Monerai sailplanes (serial numbers 2 to 368) have been found to have a potential weakness that could compromise wing integrity at high "G" loads. There have been no related accidents, but the manufacturer has imposed certain flight restrictions on the sailplanes' operation. If you are an owner of a Monerai in this series and have not been notified by direct mail, immediately contact Monnett Experimental Aircraft, Box 2984, Oshkosh, WI, 54903; (414) 426-1212.

UNHARNESSED. Transport category airplanes operated under Part 91 Subpart D and type certificated before January 1, 1958 are excluded from FAR Part 91.200 requiring a combined safety belt and shoulder harness at each flight deck station under a rule change effective March 31, 1983. Unavailability of parts or design peculiarities of the older airplanes have prevented compliance. FAR Part 91.200 continues to apply to transport airplanes type certificated since January 1, 1958. For further information contact FAA Project Development Branch, AFO-850, 800 Independence Ave., S.W., Washington, DC, 20591; (202) 426-8150.

A Farewell to GAR

Reserved IFR flight being phased out

The good news for general aviation instrument pilots is that in 13 of 20 air route traffic control centers, reservations are no longer required for IFR flights that remain within a given center's airspace. By August 22, 1983 the remaining seven centers will follow suit.

The general aviation reservation (GAR) procedure was initiated on October 19, 1981 because of traffic handling limitations imposed on FAA as a result of the controller strike in August of that year. However, the air traffic system has now been rebuilt to the point where it is handling instrument operations at approximately the pre-strike level (an average of nearly 86,000 operations a day). That figure will soon be exceeded.

Currently, GAR slots are no longer needed for instrument flights within the airspace of the following centers: Albuquerque, Atlanta, Boston, Denver, Jacksonville, Kansas City, Los Angeles, Memphis, Miami, Oakland, Salt Lake City, Seattle, and Washington.

The next step is to do away with IFR reservations for flights through adjoining centers. The first group of such "liberated" centers (Group One) consists of Seattle, Salt Lake City, Los Angeles, and Oakland. Flights between other than Group One centers are not yet exempt from the GAR requirement. For example, a flight from the Seattle Center to the Salt Lake Center would not require a GAR, but a flight from the Los Angeles Center to Salt Lake would—because LAX will not join Group One until May.

During the spring and early summer, similar center groups will do away with GAR entirely, with Group Two covering the midwest and Group Three the southeastern part of the country. Unreserved IFR flight throughout the Great Lakes and eastern portions of the U.S. will be possible in the fall, to complete FAA's nationwide inter-center restoration program.

GAR did its job largely because of the fine cooperation between pilots and controllers, plus everyone's determination to make the best of some difficult situations. Hopefully the revival of this cooperative spirit, reminiscent of the early days of pioneering flight, will remain long after the temporary hardships have been forgotten. ■

FIRING UP THE ENGINE

Too much fuel too soon can add up to big trouble

The time-honored advice to pilots who discover a fire in their engine compartment while they are trying to start up is to pull the mixture control to idle cutoff and keep on cranking—to suck the burning fuel into the cylinders and out the exhaust. That advice may work sometimes (depending on what is actually burning and where) but it is usually opposed by your natural survival instinct, which tells you to place as much distance between yourself and the flaming airplane as possible.

Fortunately, engine fires on start-up are rare. But they do occur occasionally, especially on cool or cold mornings when you are raring to go and the airplane is not. Understanding how such fires are caused may help you avoid them, or enable you to deal with them as safely as possible.

The basic cause is *flooding*. Cold weather is also a factor because the lower the outside temperature, the slower the vaporization rate of gasoline; ignition may not take place, due to the excessively lean air/fuel mixture. To increase vaporization, additional gasoline can be provided by activating the hand primer or (in some aircraft) by pushing the throttle in and out rapidly. However, too much fuel can result in an *overly rich* mixture which may not burn properly in the engine or may backfire. When a carbureted engine is flooded in this manner, the fuel may drain back down through the carburetor and enter the airbox or air intake system; and possibly collect in the lower engine cowl or on the pavement below. Backfiring may ignite the fuel in any of these areas, which is certainly a sorry way to fire up an engine.

The distinction between pumping the primer and pumping the throttle is important. The priming system delivers fuel directly to the cylinders, whereas pushing the throttle in and out activates an accelerator pump which supplies fuel to the *carburetor*. Excess fuel in the cylinders can be vented out the exhaust, but when the carburetor is flooded gravity draws the fuel back through the intake system toward the ground. (Note: aircraft with engines of less than 100 hp generally do not have carburetor accelerator pumps; even with the larger engines some aircraft manufacturers elect not to link the throttle with a pump. Refer to your owner's handbook.)

On aircraft with fuel-injected engines there is no separate priming system; priming is done with the engine's standard fuel distribution system. Nevertheless, engine flooding is quite possible with fuel injection, perhaps even more so than with carbureted engines for the uninitiated pilot. With the fuel boost control on, the throttle open and the mixture control rich to any appreciable degree, fuel will flow continuously in a fuel-injected engine, whether or not the engine is turning over. Some "priming" of this kind is recommended in cold weather, but it has to be timed exactly to avoid flooding. In the absence of a carburetor there is less likelihood of fuel dripping into the engine compartment and becoming ignited, but this is possible if there is any leakage in the lines.

The primary cause of most start-up fires is *pilot impatience*—or, as it is commonly described in the accident reports of the National Transportation Safety Board, "Improper Starting Procedures." Usually it is a case of "too much too soon"—priming well beyond the recommended number of strokes, pumping the throttle when this is not advised (or there is no pump), cranking to the verge of battery exhaustion, etc. It is important to understand—especially for pilots who rent or fly a variety of aircraft—*that different procedures are approved for different aircraft.* Handbook instructions are very specific about such details as priming technique, length of pumping action, position of primer or throttle, use of carburetor heat, etc. for various ranges of temperature. Make sure you do not mistakenly apply techniques that worked well in one type of aircraft but are not suited to another.

A pilot in Mansfield, MA learned this lesson the hard way on a chilly morning in March when he attempted to start up a Beechcraft *Musketeer* 23-19-A, which he had rented for a short ski vacation with his son in Vermont. He had rented the Beech on occasion before, although most of his 320 hours had been flown in a club Cessna 172 *Skyhawk*. Both are light, single-engine aircraft with identical Lycoming 150 hp engines (0-320E2D), although, of course, the Beech has a low-wing design and the Cessna a high wing.

With the outside air temperature at 20 °F for the dawn takeoff, the *Musketeer* refused to start after repeated priming with the six strokes recommended in the owner's handbook.

Until the starter switch was turned on, the pilot's son, 18 (not a

certificated airman), had been reading the engine start checklist to his father. At this point the pilot gestured to the boy to discontinue reading and began to pump the throttle, while listening attentively for engine firing. Throttle pumping was a habit he had picked up from his many hours in the 172. (The *Skyhawk* Operating Handbook recommends pumping the throttle in a specified manner during start-up, but it also cautions against the possible fire hazards and advises that a fire guard be in attendance. The *Musketeer's* Handbook cautions: "DO NOT PUMP THROTTLE TO START."

The engine coughed and fired intermittently several times, sending a cloud of black smoke out the exhaust, but would not continue to run, despite repeated priming and pumping.

Even with the propeller still, smoke continued to pour out of the cowl, and presently red flames were visible—at which point both occupants exited the aircraft. The pilot sent his son to find the nearest telephone and call the fire department, while he attempted to put out the fire with his cabin portable extinguisher. However he had little or no success, as he had insufficient pressure to force much of the extinguishing material inside the cowling, and he was fearful about remaining close to the airplane with its full fuel tanks. By the time a fire truck arrived from town, the aircraft was pretty well charred—including the skis.

A flooded condition is indicated by weak, erratic firing, with black smoke issuing from the exhaust. The general practice for clearing out a flooded carburetor-type engine consists of setting the mixture at full lean, opening the throttle, and cranking the engine briefly. Note: A carburetor-type engine cannot readily be cleared of flooding with the throttle closed, since in this position the butterfly valve controlling air intake is also closed. Pushing in the throttle (*slowly* all the way in to avoid pumping fuel) will position the butterfly valve full open, allowing excess fuel to be sucked into the cylinders and blown out the exhaust. For clearing out flooded fuel-injected engines, the procedure is similar, but the throttle is left closed, and the boost pumps are turned off.

This is the same type of procedure popularly recommended for snuffing out a fuel fire that occurs during start-up. Obviously it will have little effect upon a pool of fuel that is burning in the lower cowling, or on the ground.

Strict attention to the appropriate start-up checklist is the simplest form of preventing engine fires. Keeping the ignition system well-tuned and the battery fully charged also helps avoid excessive cranking at low rpm speed. In really cold temperatures pre-heating is a worthwhile investment which protects the cylinders—as well as the pilot's patience—from wearing out prematurely. (Severely congealed engine oil will not start to flow until after ignition.) Small, portable propane heaters are rentable at many general aviation airports, even south of the Mason-Dixon Line.

Incidentally, if in spite of all precautions you do happen to be victimized by an engine fire, it helps to have the right kind of fire extinguisher on board or at hand—namely one with extinguishing agents which have a blanketing effect on burning petroleum products (Class B extinguisher). A Class A extinguisher, for example, which contains mainly water is fine for ordinary combustible items like wood, paper, or plastic, but it would be of little use with an engine fire. Make sure that the equipment is large enough with strong enough pressure to deal with an engine blaze. The ordinary cabin extinguisher is not.

The presence of a fire guard—someone with a fire extinguisher in hand standing nearby when you fire up the engines—is not required for general aviation, given the high safety standards of modern aircraft. However, this is no reason why you should not accept the voluntary services of a passenger, family member, fellow pilot, etc. for this purpose. It might make you feel a little old-fashioned, but how would you feel about charred skis? ■

A portable heater warming the engine on a frosty morning at Woodbridge, VA. Preheating not only helps prevent start-up fire but saves cylinder wear from excessive cranking with congealed oil.

Hot Landings and Cold Nights

An isolated valley in the desert, strewn with spring flowers and miles away from people, buildings, cars or any other trappings of civilization, is ideal for a Sunday flight and an outdoor picnic. It becomes something less than an idyllic locale if you blow a tire and bend the prop on landing and discover that you cannot raise the nearest FSS on your radio because of the surrounding hills, and you have to resort to 121.5 and a relay call via an overflying air carrier to have a tire flown in and mounted before you and your companion can depart. You might be tempted to mutter a few imprecations on the reliability of tire manufacturers, as the desert floor heats up in the afternoon sun and your neglected repast wilts, but the chances are your anger would be misdirected. Tire failures most often occur as a result of neglect—usually under-inflation—and seldom from inherent flaws.

The predicament described above took place in the northern desert of Arizona, not far from the Grand Canyon National Park, involving two persons in a Piper *Tomahawk*. The pilot was an accountant from Flagstaff. He had acquired the aircraft a year earlier and used it to work on the books of outlying ranches, as well as for personal outings. He was known to be a careful pilot who took meticulous care of his nearly new airplane, and hosed it down after every flight.

When he was shown the remains of the blown tire, with obvious indications of abnormal wear from underinflation, he had difficulty believing it was his, since he was in the habit of having his tire pressure checked after fueling. What he had failed to consider was that tire pressure is directly related to temperature. One of the major manufacturers estimates a loss of one psi (lb. per square inch) of pressure for every four degree (F) drop in temperature.

In the desert country of Arizona, where the temperature could range between below freezing to over 80 °F in any 24 hour period in early spring, it is apparent that a very significant loss of air pressure in a 30-40 psi tire could take place overnight.

In fact, correcting the pressure (deflating) in the late afternoon, when temperatures are near their peak, and tires are also overheated from the landing rollout and taxiing to the ramp, could contribute to severe underinflation if the airplane is flown without additional correction in the morning.

While both overinflation and underinflation bring about obvious external signs of misuse, underinflation is more likely to cause less apparent structural damage that leads to unsuspected blow outs.

In view of the impact they sustain on landing, aircraft tires are designed to have about twice as much *flex* as automobile tires. Underinflation produces additional flexing, and this in turn builds up internal heat, to the point where material damage is done to the inner lining and sidewalls.

Low pressure can also allow a tube-type tire to slip on the rim, sometimes resulting in valve shear. There is an additional risk of cuts or bruises from the rim flange. Apart from material damage it causes, underinflation makes tires more susceptible to "hydroplaning" and loss of control on wet surfaces. (Hydroplaning results when a tire builds up a wave of water ahead of it as it spins, and then runs over the wave and rides on top of it, no longer in contact with the pavement.)

For light, single engine aircraft, most tires on the main gear are designed for an optimum pressure of about 40 psi (nose wheels carry about 10 psi less). Recommended levels vary considerably, and they should be adhered to as closely as possible. A generous tolerance is built into each tire, but obviously a 25-50% deviation will not be without effect on the material.

"Guess-timating" tire pressures is a losing game. Unless they are virtually flat it is impossible to tell whether airplane tires are reasonably correct, or whether they are seriously off the mark. Some pilots believe they can sense abnormal pressures during taxiing, but this is not true in most cases, and in any event once the aircraft has started to roll there is always a psychological disinclination to turn back to the ramp just because a tire may be "a little low."

Relying on maintenance personnel to keep your tires properly inflated is not generally a practical solution either since, as noted above, this leads to ignoring pressure losses that may have taken place overnight, as a result of sharp seasonal temperature changes, or perhaps from slow leakage developing after a hard landing, or terrain damage.

The best and simplest solution is to acquire a hand gauge and do your own pressure checking. Gauges employing a pointer and dial are

much more accurate, incidentally, than the ordinary auto tire gauge with a sliding rod, and are not expensive. Gauges attached to pressure hoses are commonly unreliable. If getting your plane to an air pressure source is a problem, you can buy a small portable pressure tank and keep it in the trunk of your car.

The time to check the pressure is when you preflight the aircraft at the beginning of a day's flying. If you make this a habit, you are less likely to overlook other signs of tire trouble, such as cuts, cracks, unusual wear, etc. Getting at the tires on a low wing airplane is admittedly not very convenient, especially on a wet day or when you are wearing a good suit, but a little inconvenience is worth preventing a blow-out induced ground loop into the trees, or a long walk in the desert sun.

Aside from proper inflation, tires benefit noticeably when they are given reasonable environmental protection. Hangar storage is fine, usually, but not when the airplane is parked near a source of ozone from electrical motors, which promotes fabric disintegration.

Contact with oil, gasoline, hydraulic fluid or other petroleum products is also harmful to rubber. Tires should be washed occasionally, and any remaining stains should be wiped off. On the other hand, allowing tires to stand in pools of water for long periods can actually cause a form of tire rot. Keeping them clean and dry helps.

On the whole, aircraft tires are remarkably durable and give years of service with minimal care. On the other hand, they are one of the most easily overlooked components in general aviation. They deserve more than a kick and a promise. ■

Tread Chunking

A pock mark condition in the wearing portion of tread . . . usually due to rough or unimproved runways.

Open Tread Splice

An opening in the tread splice across one or more tread ribs.

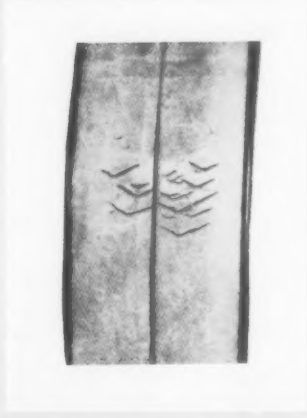
Peeled Rib

Usually begins with a cut in tread, resulting in a circumferential delamination of a tread rib.

Thrown Tread

Partial or complete loss of tread down to tread fabric ply, undertread layer or the carcass.

Chevron Cutting



Tread damage caused by running and/or braking on cross-grooved runways.

Tread Rubber Reversion

An oval-shaped area in the tread similar to a skid, but where rubber shows burning due to hydroplaning.

Maintenance and Inspection Rules Overhauled

Recent amendments to the Federal Aviation Administration's Parts 43 and 91 have clarified some long-standing sources of confusion to general aviation aircraft owners and operators concerning the terms "overhaul" and "rebuilt" as applied to maintenance on airframes, propellers, engines, appliances and component parts. These and a number of associated rule changes went into effect on October 15, 1982.

Prior to October 15, the term overhaul was not defined in the regulations. Some accident investigations indicated that a lack of complete understanding as to the extent of an overhaul service, and consequent testing, may have contributed to loss of property and life, particularly as regards engine and propeller overhaul.

Manufacturers always assign what they consider a maximum span of operating time—about 2,000 operating hours in contemporary light aircraft—that may elapse before the engine needs to be overhauled. (General aviation users are not required to follow this recommendation, except as regards certain life-limited parts; however they are responsible for doing whatever is necessary to keep their aircraft in an airworthy condition.)

For example, with engines a "top overhaul" was sometimes performed in the interest of economy. Since the piston rings and the valves are the seals in the combustion chamber, which usually need repair, a top overhaul may consist essentially of removing the cylinders to grind the valves and their seats and to replace the piston rings. In some cases—but not always—the pistons themselves and their wrist pins were also repaired. This is a much less expensive job than a complete or major overhaul, which would normally involve *all* of the engine components including the crankshaft; and accessories, like fuel metering systems, ignition, etc. The extent of the work and the testing would be indicated in the log entry, but not necessarily in detail. Often a stamped form was used in the log entry.

Maintenance Glossary

"Approve for return to service." What the mechanic does when he signs the aircraft logbook, after repair or alteration.

"Return to service." When the pilot flies the aircraft after it has been repaired or altered.

"Major alteration." An alteration not listed in the aircraft, engine or propeller specifications, that might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics or other qualities affecting airworthiness; or that is not done according to accepted practices, or cannot be done by elementary operations.

"Major repair." A repair that, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or that is not done according to accepted practices or cannot be done by elementary operations.

"Minor alteration." Any alteration other than a major alteration.

"Minor repair." Any repair other than a major repair.

"Preventive maintenance." Simple or minor preservation operations or the replacement of small standard parts not involving complex assembly operations.

NOTE: Alterations and repairs that are classed as "major," and items considered "preventive maintenance" are listed in FAR Part 43, Appendix "A."

Furthermore, owners sometimes mistakenly assumed that when a repair shop marked an aircraft "returned to service" it meant that the shop considered the aircraft airworthy *in every respect*—not simply with regard to work agreed upon between shop and owner.

The amended Part 43.2 states that no required maintenance entry may describe an ". . . aircraft, airframe, engine, propeller, appliance, or component part as being *overhauled* unless . . .

(1) Using methods, techniques, and practices acceptable to the Administrator, it has been disassembled, cleaned, inspected, repaired as necessary, and reassembled, and

(2) It has been tested in accordance with approved standards and technical data acceptable to the Administrator, which have been developed and documented by the holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under §21.305 of this chapter."

The amended rule uses similar language with respect to the term "rebuilt," except that it provides for the employment of ". . . new parts or used parts that either conform to new part tolerances and limits or to approved oversized or undersized dimensions." Note that closer conformity to *new part tolerances* is required of *rebuilt* engines, as opposed to *overhauled* engines, which makes it permissible to regard the rebuilt engine's in-use time as zero—provided the work is done by the engine manufacturer.

A change concerning record keeping now requires that whenever preventive maintenance is performed by a pilot (private certificate or better) an entry must be made *by the pilot* in the maintenance record. The entry must include

(1) A description of the work performed (or reference to data acceptable to the Administrator).

(2) Date of work completion.

"... whenever preventive maintenance is performed by a pilot ... an entry must be made in the maintenance record."

(3) Name of person performing work.

(4) Signature, certificate number, and kind of certificate held by person performing the work. The signature constitutes *approval for return to service only for the work performed.*

Also on the subject of record keeping (43.11) the rule change requires that a list of discrepancies be provided *to the owner or lessee* when an aircraft is found unairworthy as a result of any inspection conducted under Part 91. (This may require revision of existing stamps or standard printed entries.)

Other changes to Part 43 consist essentially of clarifying, consolidating, and regrouping rules concerning inspection of aircraft and certain components. One of these changes which is of particular interest to general aviation pilots who fly north of the border now allows Canadian citizens, when appropriately certificated and rated by the Canadian Ministry of Transport, to perform *all* inspections required by Part 91.169 except the annual inspection, which must be performed by the holder of a (U.S.) Inspection Authorization.

For complete details on recent changes to Parts 43 and 91, copies of the rule may be examined in Flight Standards field offices in your locality. The rules may also be purchased from the United States Government Printing Office. Part 43 Change 5 is sold as a single sale item, stock number 050-007-00556-3, price $4.50.

Part 91 is sold only as an annual subscription item, which includes changes as they occur. The stock number is 050-007-81017-2, and the price is $30.

Send check or money order, identifying the rule desired and stock number, to: Superintendent of Documents, U.S. Government Printing Office, Washington, DC, 20402. (*Prices are current and subject to change. Check with the Printing Office for later purchases.*) ■

Preventive Maintenance Performable by Pilots

Part 43, APPENDIX A, section (c)

(**Boldface** type indicates changes or recent additions to this section.)

Preventive maintenance is limited to the following work, **provided it does not involve complex assembly operations:**

(1) Removal, installation, and repair of landing gear tires.

(2) Replacing elastic shock absorber cords on landing gear.

(3) Servicing landing gear shock struts by adding oil, air, or both.

(4) Servicing landing gear wheel bearings, such as cleaning and greasing.

(5) Replacing defective safety wiring or cotter keys.

(6) Lubrication not requiring disassembly other than removal of nonstructural items such as cover plates, cowlings, and fairings.

(7) Making simple **fabric** patches not requiring rib stitching or the removal of structural parts or control surfaces. **In the case of balloons, the** making of small fabric repairs to envelopes (as defined in, and in accordance with, the balloon manufacturers' instructions) not requiring load tape repair or replacement.

(8) Replenishing hydraulic fluid in the hydraulic reservoir.

(9) Refinishing decorative coating of fuselage, **balloon baskets,** wings, tail group surfaces (excluding balanced control surfaces), fairings, cowlings, landing gear, cabin, or cockpit interior when removal or disassembly of any primary structure or operating system is not required.

(10) Applying preservative or protective material to components where no disassembly of any primary structure or operating system is involved and where such coating is not prohibited or is not contrary to good practices.

(11) Repairing upholstery and decorative furnishings of the cabin, cockpit, or **balloon basket** interior when the repairing does not require disassembly of any primary structure or operating system or interfere with an operating system or affect the primary structure of the aircraft.

(12) Making small simple repairs to fairings, nonstructural cover plates, cowlings, and small patches and reinforcements not changing the contour so as to interfere with proper airflow.

(13) Replacing side windows where that work does not interfere with the structure or any operating system such as controls, electrical equipment, etc.

(14) Replacing safety belts.

(15) Replacing seats or seat parts with replacement parts approved for the aircraft, not involving disassembly of any primary structure or operating system.

(16) Trouble shooting and repairing broken circuits in landing light wiring circuits.

(17) Replacing bulbs, reflectors, and lenses of position and landing lights.

(18) Replacing wheels and skis where no weight and balance computation is involved.

(19) Replacing any cowling not requiring removal of the propeller or disconnection of flight controls.

(20) Replacing or cleaning spark plugs and setting of spark plug gap clearance.

(21) Replacing any hose connection except hydraulic connections.

(22) Replacing prefabricated fuel lines.

(23) Cleaning fuel and oil strainers.

(24) Replacing and **servicing batteries.**

(25) Removing and installing glider wings and tail surfaces that are specifically designed for quick removal and installation and when such removal and installation can be accomplished by the pilot.

(26) Cleaning of balloon burner pilot and main nozzles in accordance with the balloon manufacturer's instructions.

(27) Replacement or adjustment of nonstructural standard fasteners incidental to operations.

(28) Removing and installing balloon baskets and burners that are specifically designed for quick removal and installation and when such removal and installation can be accomplished by the pilot, provided that baskets are not interchanged except as provided in the type certificate data sheet for that balloon.

The Airport Party Line

Common frequencies designated at uncontrolled airports

In these days of proliferating frequencies for a host of discrete flight functions there is at least one function that still relies on the old rural telephone party line principle of news distribution. In the pre-electronic age, if you wanted to know what was going on in the country around you, you just picked up the phone and listened in. The aviation counterpart of the party line is the common frequency, or "Common Traffic Advisory Frequency," as it is formally known, a simple but excellent means of finding out what kind of flight activity is going on around you at an uncontrolled airport. All you have to know is the right numbers to dial.

Those numbers will be made readily available to pilots this summer when FAA begins publishing the appropriate common frequency for the thousands of public-use airports without a control tower or where the tower is not operating.

The recommendation that pilots operating at an uncontrolled airport all tune into the same communication frequency for receiving and giving traffic advisories is not a new idea. Previous FAA Advisory Circulars have explained the importance of a common-use frequency for preventing mid-air or ground collisions or for avoiding hazardous evasive actions. Criteria have been published enabling pilots to determine whether this common frequency should be one assigned for control tower use, for the flight service station, for the UNICOM station, or for MULTICOM (air-to-air) use.

However, some confusion is still apparent at many uncontrolled airports, where incidents have been reported of pilots operating on the same runway while using different communication frequencies. Some pilots habitually switch over to UNICOM when there is no response from FAA ground stations—which is not the recommended procedure. By publishing a designated common traffic advisory frequency, FAA hopes to standardize communications.

By way of review, the criteria for establishing the common traffic advisory frequency (CTAF) are given here. Selection of the CTAF for any uncontrolled airport depends upon the ground facility located at the airport. There are four possible situations to consider:

Situation I. A control tower is located on the airport. In this case, regardless of whether the tower is open or not, or whether a flight service station or UNICOM is also present, the common frequency to use to maintain safe separation from other aircraft is the tower (local control) frequency published for that airport.

If the tower is closed (either temporarily or part-time), but a flight service station is present and functioning, the FSS will respond and listen on the tower frequency. If there is no FSS or it is closed and there is no response, stay on the frequency nevertheless and self-announce your position and intention in the blind, as indicated in Table 1. If there is a UNICOM on the airport, it is recommended you switch briefly to UNICOM, obtain wind and runway information, then return to and remain on the common frequency, updating your position.

Situation II. No tower present, but a flight service station is located on the airport. Normally the common frequency assigned will be the FSS frequency for Airport Advisory Service (123.6), which consists of:

- Wind direction and velocity
- Favored or designated runway
- Altimeter setting
- Known traffic movements
- Notices to Airmen
- Airport taxi routes
- Airport traffic pattern
- Instrument approach procedures

Note that an FSS *does not direct traffic or sequence aircraft* like a control tower, and the low-level design of the station and proximity of other buildings may limit the specialists' view over the airport. Current local weather information is, of course, available.

Once again, if there is no response, remain on the designated common frequency and self-announce appropriate traffic advisories in the blind. Switch briefly to UNICOM only as necessary.

When establishing communications with an FSS, always identify your aircraft (N-number) and type. The pilot of a departing aircraft should give his position and intentions before taxiing and again before taking the runway for departure. Inbound pilots should contact the FSS on the CTAF 10 miles out, again on entering downwind, in the pattern, on entering base and final, and again when clear of the runway. Intentions to use other than favored or designated runways should be reported immediately.

Situation III. No control tower or FSS located on the airport. Normally the UNICOM frequency will be the designated CTAF.

UNICOM is an "aeronautical advisory station," a non-FAA radio service provided by airport management at many uncontrolled airports. Frequencies may be either 122.7, 122.8, or 123.0. Pilots may request information on local weather, traffic, and runway conditions. The same reporting points used in communicating with an FSS should be used with UNICOM. Make certain that you are talking to the UNICOM at the airport of your intentions, since you may be within the range of UNICOMs at other airports using the same frequency. If there is no response, stay on the frequency and self announce.

Where interference is encountered from nearby airports using the same frequency, affected UNICOM operators are encouraged to collectively develop a "least interference" frequency

plan for the problem airports concerned, using the three frequencies 122.7, 122.8, and 123.0. Licensees should then request the Federal Communications Commission to assign frequencies in accordance with the plan.

Situation IV. Airport has no tower, FSS, or UNICOM. Monitor and self-announce on the designated common frequency, usually 122.9. Use the formally approved reporting procedures and include the airport name in each call, in order to avoid confusing pilots at other airports within radio range. ("Lone Star traffic, this is Cessna 180 November 723 heading . . .")

UNICOM may be used in connection with an ATC clearance, when approved by Air Traffic Control. However, the use of UNICOM radio for relaying information between a pilot and Air Traffic Control is limited to:

a. Revision of proposed departure time

b. Takeoff, arrival, or flight plan cancellation time

c. ATC clearance delivery, provided that formal arrangements have been made between the air traffic facility and the UNICOM licensee to handle such messages

Whenever possible, the common frequency will also be used to turn on lighting systems at uncontrolled airports. This will eliminate the need for pilots to change frequencies in order to light up a runway, allowing a continuous listening watch on a single frequency.

IMPORTANT: While these recommended practices are designed to give maximum safety for all concerned, they are voluntary in nature and in any case may not be followed by all pilots. Be on the alert for possible deviations, and for the occasional pilot who is flying without the use of radio. No procedures can be expected to replace the need for constant scanning.

Designated common frequencies will be identified for all airports in FAA's *Airport/Facility Directory* beginning on June 9, 1983. The Directory is updated every 56 days. The CTAF will also be published on instrument approach procedure charge beginning early this summer, and may be published on other appropriate aeronautical charts. ■

Additional Information

Advisory Circular 90-42C (updated), "Traffic Advisory Practices at Uncontrolled Airports." Free from DOT Publications Section, M-443.1, Washington, DC, 20590.

Advisory Circular 150/5340.27, "Air to Ground Radio Control of Lighting Systems." Free from address above.

Airport/Facility Directory. $18 per year for one vol. covering one section of the country, $9.50 for each additional sectional vol. Updated every 56 days. National Oceanic Survey, Distribution Division, C-44, Riverdale, MD, 20737. Tel. (301) 436-6990.

Airman's Information Manual. $17 per year, four times a year. Superintendent of Documents, Government Printing Office, Washington, DC, 20402.

SUMMARY OF RECOMMENDED COMMUNICATION PROCEDURES

	FACILITY AT AIRPORT	FREQUENCY USE	COMMUNICATION/BROADCAST PROCEDURES	
			OUTBOUND	*INBOUND*
1.	UNICOM (No tower or FSS)	Communication with UNICOM station on published CTAF frequency (122.7, 122.8, or 123.0). If unable to contact UNICOM station, use self-announce procedures on CTAF.	Before taxiing and taking runway for takeoff.	10 miles out. Entering downwind, base, or final. Clear of runway.
2.	No tower, FSS, or UNICOM	Self-announce on CTAF MULTICOM frequency 122.9.	Before taxiing and taking runway for takeoff.	10 miles out. Entering downwind, base, or final. Clear of runway.
3.	No tower, tower closed, FSS open	Communicate with FSS on CTAF frequency.	Before taxiing and taking runway for takeoff.	10 miles out. Entering downwind, base, or final. Clear of runway.
4.	FSS closed * (No tower)	Self-announce on CTAF.	Before taxiing and taking runway for takeoff.	10 miles out. Entering downwind, base, or final. Clear of runway.
5.	Tower closed, * FSS closed, or no FSS	Self-announce on CTAF.	Before taxiing and taking runway for takeoff.	10 miles out. Entering downwind, base, or final. Clear of runway.

* If there is a UNICOM station in operation on the airport, obtain wind and runway information from UNICOM. Return to and monitor CTAF and make self-announce broadcasts as appropriate. The wind direction and runway information may not be available on UNICOM frequency 122.950.

Redesigning The Airplane

Overall review of small plane airworthiness standards invites public comment

An unusual opportunity now exists for interested pilots and owners to participate in an overall review of airworthiness regulations as they pertain to small airplanes. This review is aimed at improving, updating, and developing airworthiness standards.

The first stage of the review program, now in progress, is a written comment period during which the public is invited to send in proposals affecting any section of Part 23 of the Federal Aviation Regulations. Part 23 defines the airworthiness design standards for the type certification of small airplanes (seating configured for nine passengers or less).

Earlier reviews of Part 23 have identified certain areas in which the present standards may not adequately reflect technical advances.

On the other hand, the agency is guided by the President's policy for reducing undue burdens of existing and future regulations. Individuals should bear this in mind when forwarding suggestions.

Required Format and Information

The processing of numerous regulatory proposals will be greatly facilitated when they are submitted in a standard format and contain certain basic information. Each proposal should include as a minimum the following information:

1. The full name or title of the proponent or a generally accepted acronym.

2. The FAR section affected.

3. A short title identifying the subject of the proposal in 10 words or less.

4. The specific regulatory language proposed to attain the objective(s) sought.

5. The language of the current rule that the proposal would change or supplement, as applicable.

6. An explanation and justification of the proposal, including answers to the following questions:

   a. What is the background?

   b. Why is the proposed change necessary?

   c. What data, reports, records, etc., support the proposal?

   d. What is the probable impact (if any) on the environment, energy consumption, and the public?

   e. What is the cost to the public of this proposal and how will it benefit the public?

When more than one proposal is submitted to attain the same objective, the information in paragraph 6 above may be stated in one of the proposals and cross-referenced in the others.

Public Conference

Depending upon the response to this invitation and the number of proposals, FAA will consider whether a public conference should be held to further clarify the proposals. If a conference is considered necessary, FAA will prepare an agenda containing a compilation of the proposals submitted, including the FAA proposals. The conference agenda will be distributed to each person who has submitted a proposal or who has expressed an interest in this small airplane airworthiness review.

The conference agenda, if issued, will provide conference dates and location, also detailed information on the scheduling of the proposals for discussion.

All proposals received in response to this notice would not necessarily appear in the conference agenda. To avoid overloading the conference, FAA may elect to exclude proposals that go beyond the scope of this review, do not follow the prescribed format, lack essential information, are not adequately justified, would require further research, or are not likely to generate fruitful discussion at the conference.

Anticipated Conference Procedures

If the decision is made to hold a conference, the following procedures will apply:

1. There will be no admission fee or other charge to attend and participate. However, all persons attending the conference must register, either in advance or at the conference. All conference sessions will be open on a space available basis to all persons who register. If necessary to complete the conference agenda, sessions may be extended to evenings and/or additional days.

2. One or more committees, each chaired by a representative of the FAA, will be established to discuss the proposals in the conference agenda.

3. All conference sessions will be recorded by a court reporter. Anyone interested in pur-

(continued on back cover)

Resonant frequencies are induced electro-dynamically to test wing for flutter susceptibility.

The Kellogg Zero Reader

Spencer Kellogg II

In the summer of 1937, a young engineering graduate embarked on a long cross-country flight alone in a Fairchild 24, taking off from Buffalo, NY and headed for California. He was not in search of any records, merely a job and the opportunity to try out some of the latest airplane instruments, but that flight was to germinate an idea that would revolutionize instrument flying.

The young man was Spencer Kellogg II, born in 1913 in Buffalo. His father was a successful oil refiner who educated his son at Cornell and at Brooklyn Polytechnic Institute, where he received a Master's degree in mechanical engineering.

At an age when other youths were tooling around the countryside in fast cars, young Spencer was flying the *Aeronca* given him at age 21 by his father and instructing part time.

For the flight to California his new employer-to-be, the Sperry Gyroscope Corporation, had loaned him two of their latest flight instruments, a directional gyro and an artificial horizon indicator. These air-driven instruments were not altogether reliable, especially the directional gyro which had to be reset three or four times an hour. Kellogg wondered if it were not possible to overcome this fault by electronically "slaving" the instrument to the earth's magnetic field. In any event it seemed to him that there was no need to rely on direct sensor presentations, when these could be electronically assessed and presented symbolically in much simpler form.

Early in his career at Sperry, Kellogg was able to work on the drift problem in air-driven directional gyros, and eventually produced the celebrated "Gyrosyn," an electronically powered compass which was a significant improvement over contemporary instruments and a boon to military pilots in World War II. At the war's end, interest in aviation was very high, and it was obvious to all in the industry that the ability to fly on schedule, day or night, in all kinds of weather, was the key that would unlock the doors to an exciting new Age of Aviation.

Wartime research had produced a vast number of new aids to instrument flying. The United States had adopted a standard instrument landing system utilizing a VOR and localizer for azimuth and a glide slope indicator for vertical glide angle. However, it became apparent that the complexity of the contemporary instrument panel was over-taxing the ability of many pilots to successfully absorb instrument training. There were so many information displays to be scanned, remembered, and related to the aircraft and the instrument landing procedure, that often ground controlled approaches were sometimes considered safer, although pilots were reluctant to surrender control.

The problem was further complicated by an absence of uniformity in panel presentation. Some instrument indicators moved clockwise, some vertically, some horizontally, some in colored arcs and some pictorially. Individually each instrument was understandable, but it was not always possible to relate it quickly and accurately to the landing procedure. Unless the pilot was extremely skillful, the actual course he made good while intercepting and establishing himself on the localizer signal, for example, involved much "porpoising" or overshooting, as it was often difficult to estimate the degree of course correction needed from the localizer display.

Kellogg, now in Sperry's Long Island plant, attacked the problem by devising what was in essence an early analog computer with a simple course comparison display. The display consisted of two perpendicularly crossed lines: when these crossed at dead center (zero deviation), the aircraft was precisely on course. For example, in the horizontal plane the heading and bank angle of the plane were represented by electronic signals which were related to signals from the localizer's radio beam.

As far as flying the ILS course was concerned, the pilot had only to adjust his heading and bank angle so as to maintain a zero reading on the display, and his flight path would be aligned with the runway. The correct glide angle was similarly achieved by adjusting the pitch angle to obtain a zero vertical reading. The display could be read at a glance and responded to readily, without interrupting the pilot's scan of essential flight instruments—since there was no need to estimate the degree of course correction needed.

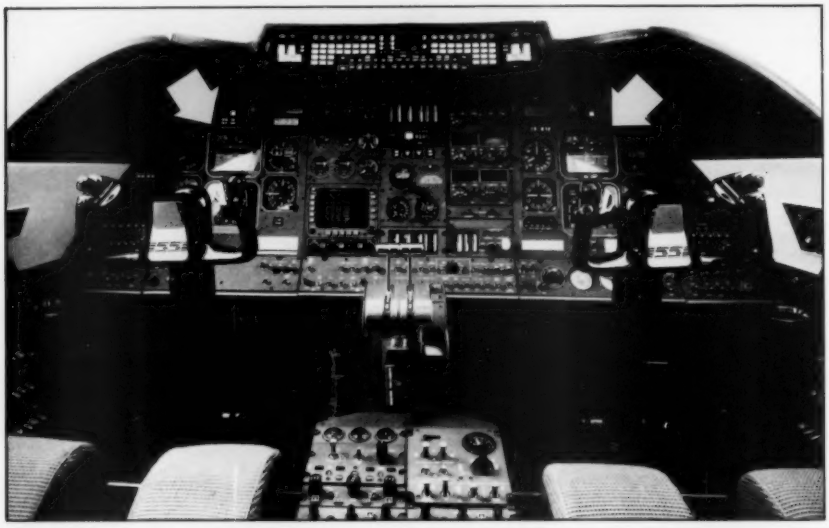
As a contemporary writer, Wolfgang Langewiesche, put it, ". . . this does your thinking for you . . . it tells you *not* what you are doing, *not* where you are, *not* where you ought to go . . . (but) what you really want to know: which way to turn, push or pull your wheel and how much. It's so simple it should be called the *Moronoscope*."

Called an "educated synthesizer" by fellow Sperry engineers, the Zero Reader weighed 25 lbs., measured 7 by 14 inches, and—according to enthusiastic pilot comments—cut the cockpit workload in half. Airline captains as well as private pilots praised it as ". . . magic . . . a God-send. . . ." Production was begun in 1950 and several thousand systems were built within the year. For this and other patents Kellogg was awarded the American Engineering Society's *Pioneer Award*, and the National Pilots' Association's *Safe Pilot Award*.

Although the original Zero Reader was soon eclipsed by more sophisticated versions known as "Flight Directors," Kellogg was credited universally for having opened the door to a tremendous expansion of instrument flying—especially among the many thousands of non-technically oriented airmen who wanted to "keep things simple" for the pilot, while enabling him to cope safely with poor visibility.

When Kellogg left Sperry in 1965 he casually flew across the Atlantic to Paris in his *Navion*, an airplane he still flies. He lives and works, in semi-retirement, at Glen Head, Long Island. Although not in the industry, his son and two daughters are certified pilots.

With instrument ratings, naturally. ■



ONE FOR ALL. All your instruments shown in one display? We are almost there, with the Electronic Flight Instrument System being developed by avionics manufacturers. EFIS' single display on a cathode ray tube screen could provide ADI, HSI, heading, course, DME, weather radar, fast/slow annunication, glide-slope, and localizer information; also airspeed, altitude, rate of descent, and decision height as well as engine, oil, and fuel information, all at the push of a button. EFIS could also show aircraft position relative to any station, create waypoints like RNAV, project courses, and illustrate approach or departure paths.

INSTRUMENT RATINGS WILL REQUIRE PARTIAL PANEL SKILL

In an effort to reduce serious accidents caused by loss of control following failure of some instruments used in IFR flight, FAA is stressing training in partial panel skills for instrument flight. Field inspectors are advising flight and ground school instructors of the need for better training, not only in early detection of instrument malfunction or failure but also in the successful use of remaining instruments. FAA approved instrument training curricula are being revised as necessary to reflect the change.

Pilot examiners and flight standards inspectors will not require demonstration of partial panel skills during instrument certification flight checks. At least one non-precision instrument approach will be flown using only the airspeed indicator, altimeter, turn and slip indicator, and magnetic compass to control the aircraft. The emphasis on partial panel flying also applies to instructors giving instrument proficiency checks.

For further information, contact Mr. Russ Atkins, FAA Airman Certification Branch, AFO-840, Washington, DC, 20591; (202) 426-8196.

AUTOMATED WEATHER OBSERVERS TESTED AT 21 AIRPORTS

Beginning in July pilots will have an opportunity to participate in a year-long demonstration of the Automated Weather Observing System (AWOS). FAA has purchased seven units from each of three different manufacturers for testing at 21 airports from Florida to Alaska. The self-contained mechanical observers will record and broadcast barometric pressure (altimeter), visibility, temperature and dew point, cloud height, precipitation, and wind information. (Previous test equipment at Frederick, MD and Shenandoah, VA could not measure visibility and ceiling.) Pilots will be able to hear the constantly updated information over a nearby NAVAID or by telephone. A computer speed synthesizer will be incorporated. The next edition of AIM will contain telephone numbers and transmission frequency assignments of the demonstration systems.

Depending upon test results some 800 AWOS units will be purchased beginning in 1985 to be installed at small, uncontrolled airports, most of which are not now covered by human weather observers. Some purchases will be made through various FAA airport aid programs; airports will also be encouraged to buy the units directly from the manufacturer.

Pilot reaction is solicited and can be sent directly to the FAA Technical Center, ACT-110, Atlantic City, NJ, 08405 using plain paper or by forms available at the test airports. Pilots may also comment via PIREP to flight service stations.

The 21 test airports are:

AK—Farewell
Galena
Valdez
AL—Auburn
CA—Palm Springs
San Luis Obispo
DC—National
FL—Panama City
IN—Muncie
IA—Dubuque
LA—Houma
MI—Houghton
MO—Vichy
NH—Jaffrey
Keene
NJ—Atlantic City
NM—Santa Fe
TX—Houston (Hobby)
WA—Bellingham
Bremerton
WV—Clarksburg

ULTRALIGHT PROGRAMS GIVEN INTERIM FAA APPROVAL

National ultralight standards for pilot competency and a program for vehicle registration have been established by the Air Safety Foundation, and approved for implementation by FAA, as an initial action in self-regulation for the rapidly growing ultralight industry.

The AOPA Air Safety Foundation, a non-profit organization, is dedicated to advancing general aviation safety. ASF is planning to establish a national network of registered ultralight pilot examiners who will train ultralight pilots. A registry of qualified ultralight examiners and pilots will be maintained. Completion of written as well as flight tests will be required.

The Foundation will also offer a vehicle registration program for ultralight owners whose vehicles comply with FAR 103 and will provide a two-digit, three-letter identification. Standards are being developed for airworthiness.

Fees will be charged for all ASF services. Pilot or vehicle registration, while not required by the FAA at this time, is expected to be developed by the ultralight community. ASF has been given interim approval for implementation of the Foundation's programs as conducive to promoting air safety and the expansion of this new form of flight.

For further information contact John Ballantyne, Director, Ultralight Programs, Air Safety Foundation, 7315 Wisconsin Ave., Bethesda, MD 20814: (301) 951-3973.

TRANSPONDER NOTIFICATION

Pilots who wish to fly aircraft without transponders in a terminal control area (TCA) need now give the air traffic control facility only an hour's notice in advance of the TCA penetration, when applying for permission. Previously the requirement was four hours' notice. This change in FAR Part 91.24(c)(3) allows the pilot to estimate arrival and departure times more accurately and to receive better real-time traffic and weather information. The advance notice must be submitted to the air traffic facility.

LATEST AIRMAN PUBLICATIONS

Technical Reports

A list of 163 scientific and technical aviation-related reports available to the public are included in a list that is free from FAA's Office of Public Affairs, APA-300, 800 Independence Ave., S.W., Washington, DC, 20591. The reports—on such subjects as air traffic control, aviation weather, approach and landing systems, security—may be purchased from the National Technical Information Service. Prices and instructions are included in the list.

TSO Index

An index of Technical Standard Orders for aeronautical products used on civil aircraft is now available. Advisory Circular 20-110A, "Index of Aviation Technical Standard Orders," is free from DOT Publications Branch, M-443.1, Washington, DC, 20590.

BFR Days

If your advice to a "Forum" reader that a January 8, 1981 Biennial Flight Review is not good on January 30, 1983 is correct, then FAA needs to conduct a massive re-education program. A lot of us have been taught that not only BFR's but medical certificates, aircraft annual inspections, transponder and statis system checks, etc., all expire at midnight on the last day of the 12th or 24th month. January 30th is just as much "within the preceeding 24 months" as January 8th. Months have names—they are not a specific day.

Bill Faucett
Beaumont, TX

Section 61.57(a) states in part that the valid period of a Biennial Flight Review is "24 months." Future revisions of FAR's may bring the rule in line with other regulations which extend validity to the last day of the month in which renewal is due.

Renting FAA Films

Does anyone still handle FAA films? I thought it was taken over by Modern Talking Pictures, New Hyde Park, NY, but my letter was returned stamped, "Moved, not forwardable." What gives?

Joe Arbeit
Chicago, IL

Sorry for the inconvenience, but Modern Talking Pictures has moved. Their new address is 5000 Park Street North, St. Petersburg, FL, 33709. For further information on how to borrow or purchase FAA safety films, send for the free FAA Film Catalogue, APA-100, 800 Independence Ave., S.W., Washington, DC, 20591.

Key to the Base

As an instructor of some considerable experience, I was surprised to find, in the Nov./Dec. 1982 issue, that your article on power-off approaches establishes the "key position" as being on the downwind leg. I was always taught, and still believe, that the key position is that point on the base leg where your intended landing spot appears on a 45° angle from the airplane's nose. Since when has this point been moved? It is certainly not the same thing as the downwind turning point, as stated in your article.

J. H. Doster
Allentown, PA

Some clarification is certainly in order. I think we can all agree that on a 180° power-off approach the throttle is closed on downwind, approximately opposite the intended touchdown area. This is the downwind "key position." (Obviously it is not the turning point—that was a mis-statement.) As the plot proceeds onto the base leg and reaches a point where he has a 45° angle to touchdown, and his altitude and the wind conditions are satisfactory, he may extend partial flaps and reduce his airspeed to 1.4 vso. *This is the base leg key position,* which still exists, although it was not identified as such in our article.

When making a 90° power-off approach, of course, the key position only exists on base leg, and this is the point at which the throttle is retarded or closed. These matters are discussed in great detail in the current (1980) edition of FAA's Flight Training Handbook. We appreciate your assistance.

Flight Test Roulette

What regulation by specific number requires a CFI applicant to demonstrate spins or bring an aircraft certificated for spins to the flight check?

J. Dumbrowski
Kansas City, MO

FAR Part 61 does not state specifically that an applicant for a flight instructor certificate must demonstrate spins during the practical test. However, Section 61.187(a) requires the applicant's logbook to be endorsed to reflect that the prospective instructor is competent to pass a practical test on six subjects, one of which is recognizing and correcting common student pilot errors. A common student pilot error involves inadvertent spins resulting from failure to recognize and properly recover from stalls or slow flight.

Consequently, should the inspector or pilot examiner—acting as a student—place the aircraft in an attitude where a spin entry is imminent, the CFI applicant is expected to recover promptly and return the aircraft to normal flight.

Therefore, the aircraft provided by the applicant should be capable of performing all required maneuvers and procedures for the certificate being sought.

Advisory Circular 61-58A, "Practical Test Guide—Flight Instructor," provides this and additional information for the instructor applicant. Price information may be obtained from the Government Printing Office, Superintendent of Documents, Washington, DC, 20402.

Lonesome Pines

Late last year I made an IFR flight from Dayton, OH to Lake Pines Airport near Skaneateles, NY. Prior to departure I checked appropriate NOTAMs at the Dayton FSS and a current issue of the Airport/Facility Directory to confirm that the airport would be attended at my time of arrival and that fuel would be available. As far as I could determine from these sources, the airport would be open and attended when I arrived. After landing at Lake Pines, however, I discovered that the only FBO was no longer in business and had been closed for several weeks. Fuel was unavailable nor was there a telephone.

When I returned to Dayton I went to the FSS, and a check of the teletype and Class II NOTAMs failed to indicate any reference to the FBO being closed. Subsequently, I telephoned the Utica, NY FSS, and a specialist told me that technically Lake Pines Airport was still open even though the FBO was not. He also told me that unless officially notified by the FBO, action could not be taken to inform other pilots—i.e., by NOTAM, FSS briefing, etc.

I pay for a subscription to the Airport/Facility Directory and check NOTAMs before every flight to avoid such problems. What if I had been low on fuel or had an emergency? Something is wrong with the system if I can't get up-to-date information through the system's sources. Why can't FAA update this information?

Gordon D. Gregg
Dayton, OH

We try. But only when an airport is federally funded is the management required to furnish pertinent information; otherwise it is strictly voluntary. Since Class II NOTAMs are published every 14 days and the Directory at 56 day intervals, it is not always possible to keep information up to the minute, although every reasonable effort is made to do so.

As indicated on p. 2 of the *Airport/Facility Directory*, there is a lag time of about one month between the cutoff date for including new information and the publication date. (The December 23, 1982 issue of the Directory lists Skaneateles as unattended.)

Your diligent checking of NOTAMs and the Directory normally should give you adequate protection. However, if you are going to an airport for the first time or if you have not been there for a while, a telephone call will afford you maximum safety—and peace of mind.

FAA GENERAL AVIATION NEWS welcomes comments from our readers. No anonymous letters will be used, but names will be withheld on request. Address: FAA GENERAL AVIATION NEWS, AFO 807, Washington, D.C. 20591.

The Doctor's Secret?

The names and addresses of pilot schools, airworthiness inspectors, designated pilot examiners, etc., are published as a part of FAA's advisory circular system. However, the directory of Aviation Medical Examiners is a well-kept secret. Any reason why it could not be an advisory circular as well?

Robert E. Leslie
Clinton, MD

The demand for the entire list is not sufficient to warrant publishing it as an advisory circular. Names of AME's are often passed on by word of mouth or recommendation. Names of suitable doctors are available from any FAA regional air surgeon or field medical clinic or from the Office of the Federal Air Surgeon, FAA, AAM-1, 800 Independence Ave., S.W., Washington, DC, 20591, (202) 426-3535.

Air-to-Air

Could you tell me the air-to-air frequency where one aircraft can talk to another aircraft while flying (noncommercial operations). According to the Airman's Information Paragraph 158, frequencies 122.75, 122.85, 122.9, and 122.925 can be used. Is this correct?

V. Mathis
Stockton, CA

Frequency 122.85, 122.9 and 122.925 are for aircraft to aircraft or aircraft to ground communications pertaining to safety; agriculture, ranching, or conservation activities; forest fire fighting; aerial application; aerial advertising; and parachute jumping. In addition 122.9 may be used to transmit pertinent advisory information in accordance with FAA recommended traffic advisory practices at uncontrolled airports. Incidentally, 122.9 is also designated as the self-announce frequency in the VFR corridor associated with the Los Angeles Terminal Control Area (TCA).

Frequency 122.750 is set aside for use at private airports not open to the public, and for pilots to talk to one another while flying.

Spare Glasses

I have just finished rereading the reprint on crash survival from FAA General Aviation News. *Over the years I have seen a number of articles on outdoor survival which list emergency supplies to have available. Nearly all have omitted an item important to many people—spare glasses.*

Anyone who would be handicapped by loss of eyeglasses should include in any emergency kit a replacement of some kind. An old pair of prescription glasses in a crushproof case, a pair of cheap reading glasses from a drug store, or even a magnifying glass would do. Incidentally, in a pinch a pinhole in a piece of paper or a card, when held up to the eye, will sharpen your vision considerably. There are many things that would have to be done in a survival situation which would be almost impossible if one could not see well.

Name withheld
Cincinnati, OH

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chasing a transcript should then contact the court reporter. A copy of the court reporter's transcript will be placed in the public docket. In addition, the sessions may be tape recorded.

4. FAA will not consider material presented at the conference by participants on any issue that is not contained in the conference agenda. Position papers or handout material may be accepted at the discretion of the committee chairperson. However, enough copies must be provided for distribution to all conference participants.

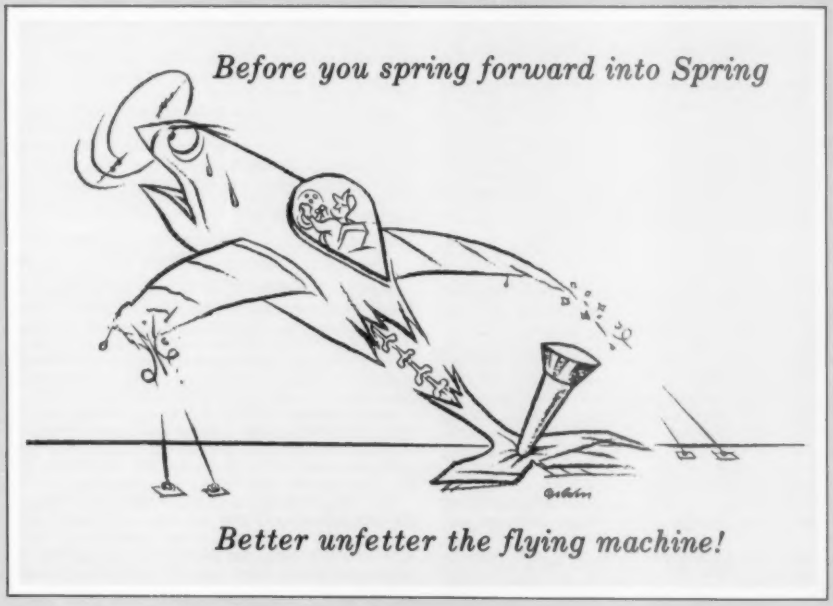
5. Proposals appearing in the conference agenda will not necessarily be included in any subsequent notice of proposed rulemaking. FAA will decide after post-conference analysis which proposals should be revised, expanded or accepted without change, and which should be deferred or rejected. Statements made by FAA participants at the conference should not be taken as expressing the final FAA position on any proposal.

Proposed and Final Rulemaking

Needed changes identified by FAA, plus proposals received and discussions at the conference, if held, will be considered in developing one or more notices of proposed rulemaking which would be published in the Federal Register. Final rules adopted pursuant to the notice would be issued after consideration of all relevant comments received.

Deadline for Proposals

Proposals must be received on or before June 2, 1983.

Address: Proposals prepared in response to this notice should be mailed or delivered in duplicate to: Federal Aviation Administration, Office of the Regional Counsel, ACE-7, Attn: Rules Docket Clerk, Docket No. 23494, Room 1558, Federal Building, 601 East 12th Street, Kansas City, Missouri 64106. All proposals must be marked: Docket No. 23494. Proposals may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

For further information contact: David Warner, Regulations and Policy Office (ACE-110), Aircraft Certification Division, Central Region, Federal Aviation Administration, 601 East 12th Street, Kansas City, Mo. 64106; Telephone (816) 374-5688. ■